

Appln. No. 10/524,069
Attny. Dckt. No. IT 020024

Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the present application.

Listing of the Claims:

1. *(currently amended)* Transmitter for transmitting packet data and comprising a detector for detecting packet data to be transmitted, characterized in that said transmitter comprises a selector for in response to a detection result of a real-time requirement selecting a first coding scheme and a first modulation scheme for coding and modulating said packet data and for in response to a non-real-time requirement selecting a second coding scheme and a second modulation scheme for coding and modulating said packet data, wherein said first coding scheme comprises a convolutional code and said first modulation scheme comprises an adaptive orthogonal frequency division modulation scheme and said second coding scheme comprises a turbo code and said second modulation scheme comprises an orthogonal frequency division modulation scheme.

2. *(cancelled)*

3. *(original)* Transmitter according to claim 2, characterized in that a further detection result comprises a target bit error rate and/or a payload bit rate.

4. *(original)* Transmitter according to claim 3, characterized in that said transmitter comprises a further detector for detecting channel conditions.

5. *(original)* Transmitter according to claim 4, characterized in that said transmitter comprises a processor system for running an algorithm.

6. *(original)* Transmitter according to claim 5, characterized in that said algorithm comprises a rate adaptive algorithm for evaluating a maximum available bit rate in dependence of said channel conditions.

7. *(original)* Transmitter according to claim 6, characterized in that said algorithm further comprises a margin adaptive algorithm for computing a bit loading in dependence of an actual bit rate.

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8. *(original)* Transmitter according to claim 7, characterized in that said transmitter comprises a code rate adapter for in response to a detection result of a real-time requirement and to a further detection result of a target bit error rate adapting a code rate for said computing.

9. *(original)* Transmitter according to claim 7, characterized in that said transmitter comprises a generator for in response to a detection result of a non-real-time requirement and to a further detection result of a target bit error rate generating a code rate and/or a block length and/or a number of iterations and/or code parameters.

10. *(currently amended)* Processor system for use in a transmitter for transmitting packet data and comprising a detector for detecting packet data to be transmitted, characterized in that said processor system comprises a selector for in response to a detection result of a real-time requirement selecting a first coding scheme and a first modulation scheme for coding and modulating said packet data and for in response to a non-real-time requirement selecting a second coding scheme and a second modulation scheme for coding and modulating said packet data, wherein said first coding scheme comprises a convolutional code and said first modulation scheme comprises an adaptive orthogonal frequency division modulation scheme and said second coding scheme comprises a turbo code and said second modulation scheme comprises an orthogonal frequency division modulation scheme.

11. *(currently amended)* Method for transmitting packet data and comprising the step of detecting packet data to be transmitted, characterized in that said method comprises the step of in response to a detection result of a real-time requirement selecting a first coding scheme and a first modulation scheme for coding and modulating said packet data and of in response to a non-real-time requirement selecting a second coding scheme and a second modulation scheme for coding and modulating said packet data, wherein said first coding scheme comprises a convolutional code and said first modulation scheme comprises an adaptive orthogonal frequency division modulation scheme and said second coding scheme comprises a turbo code and said second modulation scheme comprises an orthogonal frequency division modulation scheme.

12. *(currently amended)* Processor program product for use in a transmitter for transmitting packet data and comprising the function of detecting packet data to be transmitted, characterized in that said processor program product comprises the function of in response to a

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detection result of a real-time requirement selecting a first coding scheme and a first modulation scheme for coding and modulating said packet data and of in response to a non-real-time requirement selecting a second coding scheme and a second modulation scheme for coding and modulating said packet data, wherein said first coding scheme comprises a convolutional code and said first modulation scheme comprises an adaptive orthogonal frequency division modulation scheme and said second coding scheme comprises a turbo code and said second modulation scheme comprises an orthogonal frequency division modulation scheme.